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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,697	01/05/2004	Peter C. Williams	22188/06559	1696
24024	7590	06/20/2005	EXAMINER	
CALFEE HALTER & GRISWOLD, LLP 800 SUPERIOR AVENUE SUITE 1400 CLEVELAND, OH 44114			BOCHNA, DAVID	
			ART UNIT	PAPER NUMBER
			3679	

DATE MAILED: 06/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/707,697

Applicant(s)

WILLIAMS ET AL.

Examiner

David E. Bochna

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over German Patent 4,211,498 in view of Kreidel. The German coupling illustrates a tube gripping ferrule 2 for a tube fitting 1, the ferrule including an generally cylindrical interior wall as shown in fig. 1 through the center of the ferrule so that the ferrule can be installed over a tube end 5.

An outer wall portion axially tapers with a radially increasing dimension from a front portion of the ferrule to a back portion of the ferrule and the front portion of the ferrule indents and bites 12 into an outer surface of a tube end 5 when the fitting is assembled and pulled-up via nut 4 threaded onto the fitting 1. The interior wall comprising first (unnumbered) and second 13 cylindrical portions, the first cylindrical portion being axially adjacent a front edge of the ferrule and being the smallest interior wall diameter of the ferrule, and the second 13 cylindrical portion extending to a back edge of the ferrule as shown in fig. 2.

As to claim 2 as shown in fig. 2 the back edge of the ferrule is radially spaced from the tube end when the ferrule is assembled into and pulled-up in the fitting.

As to claim 3, the tube fitting is a two ferrule tube fitting and comprises first and second components that are joined together to install the tube fitting on a tube end and enclose two ferrules 3, 2 that are axially driven together when the tube fitting is made up, wherein the ferrule

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having the first and second cylindrical portions 2 is a front ferrule in said two ferrule tube fitting (ferrule 2 is in front of ferrule 3 if surface 12 is considered the forward end of the connection).

As to claim 4, the tube fitting is a two ferrule tube fitting and comprises first and second components that are joined together to install the tube fitting on a tube end and enclose two ferrules 3, 2 that are axially driven together when the tube fitting is made up, wherein the ferrule having the first and second cylindrical portions 2 is a back ferrule in said two ferrule tube fitting (ferrule 2 is behind ferrule 3 if you consider the opening in 14 to be the front end of the connection).

As to claim 5 the ferrule comprises metal as illustrated by the proper cross-hatchings for metal in the drawings. However it is not taught to case hardened the ferrule about its entire surface Kreidel discloses that it is known in the prior art to provide a similar type coupling with a ferrule 10 being case hardened about its entire surface (see figs. 1-3 and page 2, lines 25-40) in order to properly bite into the inserted tube. It would have been obvious to one having ordinary skill in the art at the time the invention was made to harden the ferrule 2 of the German patent as taught in the prior art of Kreidel, in order to provide a more secure coupling for the inserted tube due to increased compressibility of the ferrule into the surface of the inserted tube.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Germany patent 4,21 1,498 in view of U.S. patent 2,171,217 to Kreidel as applied to claims 1-5 and 8 above and further in view of U.S. patent 4,304,422 to Schwarz. As noted above the combination of the German patent and the Kreidel patent discloses the claimed invention except for the particular material of the ferrule being stainless steel. It would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the ferrule from a well known corrosion resistance material such as stainless steel such as disclosed by Schwarz in column 4,

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line 47 that it is known in the art to construct a similar type ferrule in a similar type coupling from stainless steel in order to improve the couplings resistance to corrosion and since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Response to Arguments

3. Applicant's arguments filed 3/31/05 have been fully considered but they are not persuasive. Applicant argues that the fitting disclosed in German Patent 4,211,498 is a plastic fitting and therefore would not be case hardened. The Examiner has read the translation of reference '498 supplied by the Applicant and has found no mention to the fact that ferrule 2 is made out of plastic. The cross hatching of ferrule 2 suggests that the ferrule is made out of metal. Applicant also argues that the previous office action was silent to the case hardening limitation of claim 1. The Examiner would like to direct the Applicant's attention to the top of page 4 of the 11/29/04 office action where the "case hardening" limitation is addressed.

Applicant argues that there is no apparent suggestion that the insert 2 bites into the hose. It is the Examiners contention that the sloped surface 12 would cause the front end of 2 to bite into the hose, as the front end of 2 has no where else to go other than radially inward when nut 4 is tightened.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Bochna whose telephone number is (571) 272-7078. The examiner can normally be reached on 8-5:30 Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'David E. Bochna', with a stylized flourish at the end.

David E. Bochna
Primary Examiner
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